JPRS 77128 8 January 1981

Worldwide Report

EPIDEMIOLOGY

No. 212



JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports
Announcements issued semi-monthly by the National Technical
Information Service, and are listed in the Monthly Catalog of
U.S. Government Publications issued by the Superintendent of
Documents, U.S. Government Printing Office, Washington, D.C.
20402.

Indexes to this report (by keyword, author, personal names, title and series) are available from Bell & Howell, Old Mansfield Road, Wooster, Ohio 44691.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

REPORT DOCUMENTATION 1. REPORT NO. JPRS 77128	1	1. Recipient's Accession No.
WORLDWIDE REPORT: EPIDEMIOLOGY, No. 212		8 January 1981
	•	
Author(s)	6. Performing Organization Rept. No	
Joint Publications Research Service		10. Project/Task/Work Unit No.
1000 North Glebe Road		11. Contract(C) or Grant(G) No.
Arlington, Virginia 22201		(6)
	(3)	
12. Sponsoring Organization Name and Address		13. Type of Report & Period Covered
As above		
	14.	
S. Supplementary Hotes		
& Abetract (Limit: 200 warms)		

This serial report contains worldwide press and radio coverage of incidence, outbreak, and other aspects of human, animal, and plant diseases, insect pests and control, sanitation conditions, immunization and public health programs.

17. Document Analysis s. Descriptors

Worldwide Clinical Medicine Environmental Biology Hygiene and Sanitation Microbiology

3. Identifiers/Open-Ended Terms

& COSATI FOR GROUP 2E, 6E, 6F, 6I, 6M

18 Availability Statemen: Unlimited Availability	UNCLASSIFIED 21. No. of Pages 39		
Sold by NTIS Springfield, Virginia 22161	UNCLASSIFIED	ZZ. Price	

WORLDWIDE REPORT

EPIDEMIOLOGY

No. 212

CONTENTS

HUMAN DISEASES

AUSTRALIA

	obverment inquity ocoles overall meater system	
	(various sources, 1-2 Nov 80)	1
	Jamison Report, by Stephen Mills	
	Funds Shortage, by Nicholas Rothwell	
	Hospital Evaluations	
	Tourists Warned on Importing Animal, Plant Diseases	
	(THE WEST AUSTRALIAN, 1 Nov 80)	4
	Malaria Cases in Country Rising Sharply	
	(Gregory Turnbull; THE SYDNEY MORNING HERALD, 8 Nov 80)	5
	Briefs	
	Water Clean-up	7
	Manjimup Sewers	7
	Outdated Hospital	7
	Salmonella in Water	7
	New Wagga Hospital	8
	Canning Plant Closure	8
	Reservoir Protection	8
	Hospital Improvements	8
CHILE		
	Briefs	
	Two Die of Meningitis	9
GHANA		
	Briefs	
	Cholera Cases Reported	10

INDIA

	Tuberculosis Center Director Receives Award (THE TIMES OF INDIA, 22 Nov 80)	. 11
	Fight Against Malaria Said to Lose Ground (Editorial; THE SUNDAY STATESMAN, 23 Nov 80)	. 12
	Potency of Polio Vaccine Now in Use Questioned (THE TIMES OF INDIA, 24 Nov 80)	. 14
	Briefs	
	Viral Conjunctivitis Epidemic Cholera Deaths in Gujrat	15 15
INDONES	IA	
	Briefs	
	Hemorrhagic Fever in Central Kalimantan	16
	Measles in Central Kalimantan Gastroenteritis in Bolaang Mongondow	16 16
MALAWI		
	Infections, Measles Cause High Rate of Blindness (THE HERALD, 18 Dec 80)	. 17
MALAYS	A	
	Viral Conjunctivitis Reported on East, West Coasts (NEW SUNDAY TIMES, 9 Nov 80; NEW STRAITS TIMES, 10 Nov 80)	. 19
	Over 30 Cases Daily Increase in Capital Area	
NIGERI		
	Briefs Tsetse Fly Eradication	20
PAKIST	N .	
	Afghan Refugees Surveyed for Tuberculosis (DAWN, 13 Dec 80)	. 21
	Briefs	22
	Gastro-Enteritis in Karachi Punjab Vaccination Centers	22
UNITED	ARAB EMIRATES	
	Briefs	
	Ten Henatitis Cases	23

VIETNAM

Gia Lai-Kon Tum Reports Progress in Eliminating Malaria (Nguyen The Huynh; NHAN DAN, 10 Nov 80)	24
VENEZUELA	
Yellow Fever Cases Reported, Preventive Measures Taken (EL UNIVERSAL, 13 Nov 80)	26
Briefs Rabies Case Reported	27
ANIMAL DISEASES	
CUBA	
Testing for African Swine Fever in Guantanamo (Orlando Gomez; GRANMA, 17 Nov 80)	28
VENEZUELA	
'Pervovirus' Reported to be Attacking Dog Population (EL UNIVERSAL, 18 Nov 80)	30
Foot-and-Mouth Disease Outbreak Reported (EL NACIONAL, 6 Nov 80)	31
PLANT DISEASES AND INSECT PESTS	
AUSTRALIA	
Briefs Effects of Drought Skeleton Weed	32 32
DOMINICAN REPUBLIC	
Outbreak of Blue Mold Disease Reported (Epifanio Rodriguez; LISTIN DIARIO, 7 Nov 80)	33
INDIA	
Kerala Palm Trees Affected by Root Wilt (THE HINDU, 24 Nov 80)	35

GOVERNMENT INQUIRY SCORES OVERALL HEALTH SYSTEM

Jamison Report

Melbourne THE AGE in English 1 Nov 80 p 5

[Article by Stephen Mills: "Health Care System 'Inefficient'"]

[Text] Canberra--Members of a Government inquiry into Australia's health system have criticised its funding management, costs, functions and economic and philosophic basis.

The three members of the Jamison inquiry into the efficiency and administration of hospitals said the system wasted money. One of its recommendations seems certain to be to make doctors in hospitals more accountable for costs.

Addressing the Australian Hospitals Association's 1980 conference, the chairman of the inquiry Mr Jim Jamison, said hospital funding should encourage efficiency. Money should not be spent just because it was available.

State and Federal Governments provided public hospitals with about \$3000 million in 1979-80. This was 40 per cent of all Federal health funds and 70 per cent of State funds.

Mr Jamieson is a former chairman of an accounting firm.

Dr John Yeatman, a member of the inquiry, said the method of distributing Federal funds was not logical. Hospital managers had to prepare bids for money in a task "not merely incapable of satisfactory completion, but daunting, frustrating and totally without meaning or purpose."

The third member of the inquiry, Mr Charles De Boos, criticised hospital annual reports, which he claimed did not reveal whether hospitals got value for tax-payers' money.

He doubted that the traditional hospital management structure was efficient.
"I have heard of hospitals where the matron was not on speaking terms with the manager, and where the medical superintendent denied any responsibility for the hospital's operations outside his strictly defined brief, and where the board was not interested in day-to-day affairs." he said.

"Is it surprising that some hospitals appear neither efficient or effective? Is it surprising that costs sometimes seem to be out of control?"

The Jamison report, due to be handed to the Government on 31 December, is likely to provide the basis for any Government changes to health care institutions in Australia -- and possibly to the health insurance system.

None of the commissioners referred specifically to recommendations they would make in their report. Instead they presented the range of options they were considering, and concentrated on sweeping criticisms of existing arrangements.

Mr Jamison said evidence presented to the commission showed that "a great deal is wrong" with the delivery of health care services: the way it is funded and manager, its costs, functions, achievements and even its philosophical and economic bases. [as published]

The commission had been told that the whole system of hospital funding inefficiency, he said. [as published]

Legislation prevented the imposition of compulsory insurance without a change of Government policy. "We must be aware of this fact when considering the evidence of those who have suggested compulsory insurance. On the other hand we have had it put very strongly to us that there should be an incentive to encourage voluntary insurance," he said.

Mr Yeatman said that one key problem was the annual "bids" by hospitals for Government money. Dr Yeatman said these were made on the basis not of needs but of spending in the previous year. The system meant that hospital managers did not have to consider whether the services they were providing were necessary or were being provided as efficiently as possible, he said.

All the solutions suggested to the commission by hospitals involved giving more responsibility to hospital managements rather than governments. But, Dr Yeatman said, there were doubts that managements were equipped for the extra duties.

Funds Shortage

Canberra THE WEEKEND AUSTRALIAN in English 1-2 Nov 80 p 5

[Article by Nicholas Rothwell: "Fund Freeze Threatens Health Care"]

[Text]

HEALTH care standards are likely to suffer soon because hospitals are short of money, an inquiry was told yesterday.

The president of the Australian Hospitals Association, Mr S. K. Stele, also said the increasing number of elderly people in the community is imposing strains on the medical system.

He warned the Commission of Inquiry on the Efficiency and Administration of Hospitals that the Treasury's continued freeze on funds would soon interfere with standards of care and the provision of a range of medical services.

The commission itself had conceded that 85 per cent of the increase in Australia's total health bill in the past decade was caused by higher prices. This disproved any suggestion that health costs were "out of control".

Mr Stele said it was risky to emphasise increases in the proportion of health expenditure to the gross domestic product.

The percentage depended not only on the rate at which health costs changed but also on the movement of GDP.

DECEPTIVE

The annual rate of increase had fallen from 20 to 12 per cent in the past five years, which made such figures deceptive.

Hospitals were labor-intensive with staff on call 24 hours a day, making costs rise faster in hospitals than in the capital-intensive industries which determine increases in GDP

In the past 12 years the amount spent on health had risen by only 4 per cent in real terms, allowing for population growth and changing

"Health care costs have not been as uncontrolled and extravagant as some people have implied," Mr Stele said.

There was now scope to improve financial and organisational efficiency "but we have yet to see it proved that the hospital industry is less efficient than any other large-scale enterprise," he said.

Hospitals were susceptible to political influence which affected the services provided to the community and the support hospitals gave the community as employers.

"If standards are to be main-tained larger amounts of money will have to be made available."

Mr Stele predicted that health care needs would become acute as the population aged and became less healthy.

Many hospitals were already in desperate need of new equipment. An increase was essential in the real income available to finance hospital services.

hospital services.

"We are not advocating openended funding arrangements but
still wish to see money allocated on
a realistic assessment of demand
and standards of service to patients," Mr Stele said.

He predicted there would be
heavy competition between social
welfare, unemployment relief and
health care for funds.

Mr Stele said the expression "zero

Mr Stele said the expression "zero real growth" appealed to Treasury officials but had no place in health care because it was misleading.

Zero real growth implied that federal and State governments would not allow hospitals to spend more in real terms in any year than in the previous 12 months.

Hospital Evaluations

Perth THE WEST AUSTRALIAN in English 1 Nov 80 p 16

[Text] Canberra: The Federal Government was developing a computerised system to analyse and compare the costs and performance of Australian hospitals, the Health Minister, Mr MacKellar, said yesterday.

He said that the system should produce considerable cost savings and be of real benefit to hospitals and the State and Federal Governments.

But he denied that it would effectively be a central police force to check on hospital spending.

"We are trying to assist hospitals work out ways in which they can more effectively deliver high-quality health care to their patients," Mr MacKellar said.

"Hospital care and institutional care generally is a very expensive item. What we want to see is a method by which high-quality health care delivery can be made available at the most cost-effective price."

Mr MacKellar was speaking while opening the Australian Hospitals Association's annual congress in Canberra.

TOURISTS WARNED ON IMPORTING ANIMAL, PLANT DISEASES

Perth THE WEST AUSTRALIAN in English 1 Nov 80 p 34

[Text] The popularity of overseas holidays by Australians has prompted a campaign to keep Australia free of exotic animal and plant diseases.

It carries the slogan "Declare it for Australia" and encourages Australians Travelling overseas to be careful about what they bring back into the country.

Items such as food (sausages, cheese, fruit) animals and birds, curios, untanned leather goods, plants and seeds are banned because they could be carriers of viruses and insect pests which could threaten Australian crops and livestock.

Conservationist Harry Butler supports the campaign and says that even the most innocent looking souvenirs or foods could be a source of disease.

This programme is sponsored by the Commonwealth Health Department quarantine service.

The campaign warns of the "catastrophic economic effects" of foot and mouth disease if it was introduced into Australia.

Other dangerous diseases which could be introduced were rabies, virulent Newcastle disease (which is a risk to native birds and poultry), swine fever (foodstuffs and animal products), citrus greening, potato cyst nematode, sugar-cane smut, fireblight (orchards), timber pests and fruit flies.

The department said that more than one million people would leave Australia for overseas this year and about 800,000 would come to Australia for the first time from other countries.

MALARIA CASES IN COUNTRY RISING SHARPLY

Sydney THE SYDNEY MORNING HERALD in English 8 Nov 80 p 2

[Article by Gregory Turnbull]

[Text] A worldwide upsurge in malaria has produced a disturbing increase in the incidence of the disease in Australia.

The number of cases reported this year is expected to pass 500, twice as many as in 1975.

Malaria is fully imported. Almost all the cases involve travellers returning from Papua New Guinea and other parts of Asia and Africa.

A large part of Australia's north, above a line roughly from Townsville to Broome, is a malaria receptive area. It has a suitable climate and mosquito population to support the malaria parasites.

According to Professor Robert Black, a specialist in tropical diseases at the Commonwealth Institute of Health in Sydney, Australia's record in the treatment and control of malaria has been remarkably good, but the ingredients for an epidemic remain in the north.

A concern to Australian health authorities is the emergence in New Guinea since the mid-1970s of a new strain of one of the malaria parasites, Plasmodium falciparum, which is resistant to the usual antimalaria drug chloroquine.

Falciparum malaria can be deadly if not treated in time. The more common form, Plasmodium vivax, does not threaten the life of an otherwise healthy peson.

Many of the people who return with malaria will have been taking chloroquine, and will believe the drug has failed or they have contracted a resistant strain.

In fact, most will have vivax malaria. he chloroquine keeps the parasites out of their blood while they take it, but persisting forms of parasites in the liver flare up when they stop.

Chloroquine is no guarantee against even vivax malaria, only against the symptoms. A stronger drug, primaquine, is needed to eliminate the infection and prevent relapses.

About 250,000 people a year enter Australia after visiting or residing in a malarious country, according to Professor Black.

"A doctor should routinely ask all his patients about recent travel, and if he gets a positive answer he should switch on his list of additional possible diseases, and malaria should be on the top of the list," Professor Black said.

"If he misses the diagnosis of falciparum, that patient is going to be lucky to survive.

"The symptoms include vomiting, headache and shivering, and anyone with those signs after travel ought to go to a doctor and raise the possibility of malaria."

On 1979 figures, the Australians most likely to catch main are males aged between 21 and 30 years.

People at special risk include many young people who preserve visit the rural areas of tropical countries and stay in villages rather than city hotels.

Such travellers are advised to seek reliable information about malaria.

For those going to New Guinea, the drugs developed to counter the chloroquineresistant strains are a must.

They are marketed as Fansidar or Moloprim, but they are not recommended for pregnant women.

Pregnant women may use chloroquine, but if they go to New Guinea or other countries with chloroquine-resistant strains they should be aware that they do not have full protection, and that malaria may induce a miscarriage.

Cases of Malaria reported in Australia

1969	166	1975	255
1970	199	1976	264
1971	220	1977	291
1972	170	1978	323
1973	194	1979	474
1974	201	1980	483 (to October 17)

BRIEFS

WATER CLEAN-UP--There will be no more rusty nappies at the Gap. The Brisbane City Council tomorrow is expected to approve spending of \$350,000 to improve the quality of water for the area. Council Opposition Leader and alderman for The Gap, Alderman Andrews, has campaigned strongly to have treatment of the water supply from Enoggera Dam upgraded. The high iron content in the water earlier this year had turned nappies hung to dry on clothealines rusty overnight. Council works committee chairman, Alderman St Ledger, said yesterday the council would install a filtration plant at Enoggera Dam at a cost of \$350,000. Alderman Andrews said: "The claims by the Labor administration of a takeover of water supply are absolute garbage." [Text] [Brisbane THE COURIER-MAIL in English 3 Nov 80 p 24]

MANJIMUP SEMERS--Sewers: There are plans to spend about \$380,000 on the construction of reticulation sewers and associated works to extend Manjimup's sewerage scheme in two areas. The money consists chiefly of local authority borrowings. Work cannot begin till the funds become available. [Text] [Perth THE WEST AUSTRALIAN in English 5 Nov 80 p 52]

OUTDATED HOSPITAL—The Merredin district hospital is so run down that wheat-belt people are travelling to Perth and out-of-the way hospitals for treatment...but its fate may be decided by the Minister for Health within the next few days. The president of the hospital's auxiliary, Hr Harry Snell, said this yesterday. He said that a new hospital was needed because the present one was beyond repair. Mr Snell said that the hospital, meant to serve five to six thousand people, was built in the 1930s and was now 50 years out of date. "Things are not worth renovating," he said. "It needs pulling down and the region ought to get a new hospital as soon as possible. Merredin is the centre of the wheatbelt and deserves better than this. Years ago it was suggested that a regional hospital should be built at Herredin and plans have been cancelled several times. A new hospital is long overdue and better facilities would encourage specialists to include Merredin on regional visits." [Excerpts] [Perth THE WEST AUSTRALIAN in English 5 Nov 80 p 44]

SALMONELLA IN WATER--Half the people in the east Pilbara mining centre of Harble Bar in Western Australia may have been poisoned by salmonella bacteria in the town's water supply. The local nursing sister, Mrs Jill Hutchinson, has treated about half the 400 residents recently for vomiting and diarrhoea-symptoms similar to those of salmonella poisoning. Now 12 of the cases have been confirmed as salmonella following tests done in Port Hedland. All the victims are children staying

at a hostel attached to Marble Bar's primary school. Tests have not been done on the rest of those affected. Initially, it was thought a 24-hour virus had hit the area. But the town's water supply is now suspected because of the speed with which the disease spread. The shire council has called in the Public Works Department, which has started cleaning and rechlorinating the town's reservoir. Samples of water have been sent to Perth for analysis. Mrs Mutchinson said the main problem with salmonella was that the victims became carriers of the disease after they recovered from the symptoms. [Text] [Canberra THE AUSTRALIAN in English 6 Nov 80 p 3]

NEW WAGGA HOSPITAL--A \$30 million hospital is to be built at Wagga, the Minister for Health, Mr Stewart, announced yesterday. Mr Stewart, in Wagga for today's country Cabinet meeting, said that planned redevelopment of the existing hospital would make further expansion impossible. The new 250-bed hospital will be built on a 19.5 hectare site on Crown land on the fringe of the city. Site work is expected to begin early next year. [Text] [Sydney THE SYDNEY MORNING HERALD in English 6 Nov 80 p 9]

CANNING PLANT CLOSURE—The Albany factory of Hunts Foods Pty Ltd, where tins of defective fish were canned, was temporarily closed yesterday. The Minister for Health, Mr Young, said that production would stop while the fish canning process was examined. Inspections last week found some areas of anxiety in the cooling process. The decision to close the factory was made after talks between company representatives, senior officers of the Department of Health and medical services. Mr Young said that stringent quality controls applied by the company had shown no abnormalities. But the cooling process would be examined by the company and departmental health surveyors to ensure that it was sterile. Monitoring processes also would be introduced. Hunts had produced more than five million cans in the past 18 months and fewer than 50 had been defective. [Excerpts] [Perth THE WEST AUSTRALIAN in English 6 Nov 80 p 5]

RESERVOIR PROTECTION—Measures taken against the spread of amoebic meningitus to country water supplies included speeding up the programme to provide roofs for as many open storages as possible, the Minister for Lands, Hr Wordsworth, said yesterday. Storage facilities that could not be roofed for practical reasons would be chlorinated, he said. During the past financial year roofs had been built at the Sawyers Valley, Northan and Worsley service reservoirs and chlorination equipment had been installed at Cunderdin. There were three minor installations near Merredin. Mr Wordsworth was replying in the Legislative Council to Mr J. M. Brown (Lab., South-East), on behalf of the Minister for Water Resources, Mr Mensaros. [Text] [Perth THE WEST AUSTRALIAN in English 6 Nov 80 p 33]

HOSPITAL IMPROVEMENTS—The Queensland Government will spend a record \$300 million on improving its hospitals and other health care buildings over the next two years. A report prepared for the State Minister for Health, Sir William Knox, and released yesterday said the money would be spent on expansion, redevelopment, rebuilding, replacement, and modernisation of facilities throughout the State. Sir William said new hospitals costing about \$28 million were already being built at Dysart, Cairns, Biloela, and Wynnum. Others, to cost more than \$15 million, were planned for Cooktown, Cunnamulla, Boulia, Goondiwindi, Keperra, Mitchell, and Mugindi. [Text] [Canberra THE AUSTRALIAN in English 11 Nov 80 p 2]

CHILE

BRIEFS

TWO DIE OF MENINGITIS—Antofagasta—Two children have died of meningitis in this city's hospital. Although it was stated that these are isolated cases, the directorate of the Regional Hospital took all the necessary epidemiological control measures, both among family members and hospital center personnel who had come in contact with the two children. The first case involved Cristian Soto Soto, a 6-month old baby, who died on Tuesday from purulent meningitis. Yesterday, Andres Bariles, 2 1/2, died of meningococcal meningitis, an infectious disease. [Text] [Santiago LA NACION in Spanish 14 Nov 80 p 13-A] 8143

BRIEFS

CHOLERA CASES REPORTED—Accra, 16 Dec (AFP)—Nine people have died of cholera and many others have been hospitalized in Ghana's eastern region, 100 kms (60 miles) east of Accra, it was reported here today. A delegation that went to the scene reported that the epidemic broke out about 10 days ago and that the situation had become very alarming. More people were expected to die, the report said, despite the efforts of a medical team sent in. Anti-cholera medicines were lacking in the region's hospitals, the report said. The Ghanaian press said today that cholera also had been reported in the central region, 100 kms west of Accra.

[Text] [AB161801 Paris AFP in English 1800 GMT 16 Dec 80]

TUBERCULOSIS CENTER DIRECTOR RECEIVES AWARD

Bombay THE TIMES OF INDIA in English 22 Nov 80 p 15

[Text] Bombay, November 21: A major breakthrough in the treatment of tuberculosis is on the cards by combining drugs that kill dividing and persisting bacteria said Dr S. P. Tripathy, director, TB Research Centre, Madras, here today. He was delivering the Wander-Tuberculosis Association of India oration, having received the Wander-TAI award for outstanding work in the cure of TB.

Dr Tripathy pointed out that there were about ten million TB cases in the country of which 2.5 million were infectious. He noted that conventional chemotherapy extended from over 12 to 18 months and produced a cure rate of 85 per cent and a relapse rate of 15 per cent. The prolonged intake of a certain drug led to lack of cooperation on the part of the patients when the symptoms started disappearing slowly, resulting in relapses, he said.

To combat this, combinations containing streptomycin, isoniazid, rifampicin and pyrazinamide proved almost 100 per cent effective and relapse rates fell to about two per cent. This short course chemotherapy, he noted, was expensive and could not be sustained owing to lack of finances. However, new regimens were now being tried out which without sacrificing efficacy would be less expensive.

Short-course chemotherapy had a number of advantages. There was less drug toxocity and early default from treatment was less hazardous to the patient. Also more effort could be concentrated on ensuring that patients continued to attend and actually continued to remain on their chemotherapy for the prescribed period, and routine follow-up after the end of chemotherapy could be abandoned.

The TB Research Centre in Madras holds trials and also collaborates with the World Health Organisation, British Medical Research Council, Indian Council of Medical Research and the government of Tamil Nadu. It has been the pioneer to demonstrate that ambulatory treatment in the cure of TB is effective and patients need not be treated in sanatoriums but can as well be treated at home. The revolutior ry findings in short-course chemotherapy are also the work of the Research t ntre, which undertook studies in various regions with various combinations of drugs.

According to Dr Tripathy research is being conducted in several institutions and the problem of relapse is being studied with the objective of evolving effective short-course regimens can be applied in developing countries and in the national TB control progr

CSO: 5400 11

FIGHT AGAINST MALARIA SAID TO LOSE GROUND

Calcutta THE SUNDAY STATESMAN in English 23 Nov 80 p 6

[Editorial: "Menace of Malaria"]

[Text] A significant increase in the incidence of malaria, which during the mid sixties had been almost brought under control, is causing growing concern to the World Health Organization and many national health authorities. The problem is said to be based largely on Kampuchea and its neighboring countries which have over the past few years experienced mass population shifts caused by political instability. Large-scale population movements not only cause the disease to spread to previously unaffected areas but can introduce into a region a new strain to which the local population has not built up resistance. Of particular concern is the spread of the new falciparum strain which attacks the brain and can prove fatal in the absence of prompt and effective treatment. The fact that an estimated 43 mosquito species seem to have developed resistance to insecticide sprays such as DDT and that a number of parasite strains, most notably falciparum, appear resistant to the normal chloroquine treatment has complicated the problem, which has spread to India through the north-eastern States.

Despite the fact that India's National Malaria Eradication Programme is the largest project of its kind in the world, with an annual allocation of Rs 75 crores which is about forty per cent of the Union Health Ministry's 1980-81 budget, the war against malaria in India seems to be losing ground after the successes of the sixties. Between 1960 and 1965, the incidence of the disease was brought down from 75 million to 100,000 cases. This was largely achieved by intensive DDT spraying programmes. The oil crisis of the early sev nties caused a cut-back in the programmes. Furthermore, the carriers and programmes began to show new resistance. The result was that malaria cases to some six and a half million in 1976. Though the overall figure decision to under three million cases last year, the mortality rate has shown a man d increase, mainly due to the deadly falciparum strain. It is feared that the extensive floods earlier this year will lead to further spread of the disease.

The seriousness of the situation has raised questions about the effectiveness of the eradication programme in countering the malaria menace. It is being increasingly felt that sufficient attention has not been given to proper preventive measures. A WHO report reveals that of the 640 million Indians living in malaria-infested areas more than 30 per cent are totally unprotected by anti-vector

measures. Critics claim that the NMEP relies too heavily on insecticides which are not only costly but also, going by recent experience, of doubtful efficacy. The furore caused by the official admission a few months ago that the NMEP had spent several crores on "substandard" insecticides has raised further doubts.

Advocates of a new approach to combating malaria stress the need for environmental improvement and antilarval measures. Paddy fields are the main mosquito breeding grounds in rural areas, and the use of larvae destroying bacterial agents and fungal strains has been suggested. Other suggested measures include intermittent irrigation, drainage of waste water and the prevention of wet cultivation within half a kilometre of village. According to one estimate, a 10-year national programme of environmental improvement, which would cost the exchequer not more than Rs 15 crores a year, could make over two lakh villages free from malaria. New lines of research have also been initiated in the field of immunology in order to develop an effective anti-malaria vaccine. A major achievement is said to be development of a culture of chloroquine resistant parasites from which it may be possible to derive antigens which will aid the formation of malaria anti-bodies.

POTENCY OF POLIO VACCINE NOW IN USE QUESTIONED

THE TIMES OF INDIA in English 24 Nov 80 p 6 Bombay

[Text]

NEW DELHI, November 23

DOUBTS about the potency of the polio vaccine used by hos-pitals and private doctors have once again been raised following the closure of the only polio vac-cine testing laboratory (PTL) in Delhi.

PTL was set up in 1968 at the na-tional institute of communicable diseases to keep a watch on the qua-lity of imported vaccine and to test the safety of the vaccine made at Coosul.

Following reports of paralysis in immunived children in 197; PTL had launched a massive compage to test every batch of imported vessyas before release to the market

The closure of PTE, two years ago has raised doubts about the quality of the vaccine' at present used in hospitals since vaccine samples are not currently usued for potency.

Health officials said FTL was closed as its director Dr. S. C. Arys, had quit. He was the only person traused in safety test of polio vaccine.

Dr. Anya told PTI that he resigned in the "public interest" as he was harassed and his staff was curtailed to an extent that reliable safety test were not possible.

NEW LABORATORY

Health officials said that laboratory is being establish Kassuli for safety testing of vaccine and it would be ready

Atensiwhile the tale of polio vaccine in the absence of a government la-horatory for quality control has caused concern among the medical com-munity particularly at a time when the incidence of polio is on the rise.

Dr. Jacob John, a virologist at the Vellore medical hospital, and in a recent report to the British Medical

that the pot

out two per cent.
With the closure of PTL, it is not tongs if the policy variants.

According to Dr. Arrs. FTL used to draw samples from the batches in heir arrival at the airport and clear

them only after a potency test.

He said import of vaccine if
Yugodavia was stopped by PTL
the basis of potency tests. He do
ed if such tests were done on
actions recently imported from

At the time of closure, PTL had the second largest monkey colony and was to be designated by the World Health Organisation as a regional centre for the neurovirulence and potency testing od oral polio vaccine

Neurovirulence test (that involves 60 monkeys and three weeks time) is the nost critical test for safety of polio socias. Improper testing lad to the

death of 80 children in the US in the 1950s, Dr. Arva vad. With the closure of PTL, there is no nazional laboratory at present to test the safety of the vaccine being produced at the Haffkine institute,

produced at the Haffkina institute, It is learns that India is now dependent on an Italian expert, supplied by the WHO, for safety resting of Haffkine vaccine and training accentists in massovirulance testing.

Official sources and that the Haffkine vaccine will be tested independently by the Kassati laboratory when it is ready. While neurovirulence testing is done on vaccine during production, potency tests are required frequently on the vaccine stored in hospitals and clinical. Experts said the vaccine loses potency when not stored in deep freeze. Health officials admerted that before its cloture PTL had regularly been drawing samples from 208 centres in the country for potency tests.

BRIEFS

VIRAL CONJUNCTIVITIS EPIDEMIC-Hadras, Nov. 24. Viral conjunctivitis, a highly contagious eye infection, has broken out in an epidemic form in Madras. A sharp rise in the incidence of this painful eye disease was noticed a week after the recent torrential rains. Since then there has been a steady increase in the number of those with this eye ailment lining up at the Government hospitals and private clinics. According to Dr. E.T. Selvam, Superintendent of the Government Ophthalmic Hospital in Egmore, over 200 out of 500 persons attending the out-patient department of the hospital are found to have contracted the infection. "In view of the outbreak, we are now restricting the operations at the hospital. This is being done as a precautionary measure to avoid complications that may develop if the operated persons caught conjunctivitis", he said. In most of the patients with conjunctivitis this time doctors have observed secondary bacteriological infection. So, they feel, the contagion is possibly water borne. [Excerpt] [Madras THE HINDU in English 25 Nov 80 p 1]

CHOLERA DEATHS IN GUJRAT-New Delhi, Dec. 9: Sixty-five people have died in a gastro enteritis and cholera epidemic in the past five weeks in the western state of Gujrat, the Press Trust of India (PTI) reported yesterday. The famous Gir Sanctuary, the only habitat left of the Asiatic lion, has been closed to tourists following the outbreak. The state government said President Sanjiva Reddy will visit the worst hit Saurashtra region for three days next week.—Reuter. [Taxt] [Karachi BUSINESS RECORDER in English 10 Dec 80 p 3]

BRIEFS

HEMORRHAGIC FEVER IN CENTRAL KALIMANTAN--Twenty-two of the 240 persons reported to have contracted hemorrhagic fever died in Central Kalimantan Province. The disease reportedly struck the East Kotawaringin Regency, especially Pundu village, Cempaga Subdistrict, where 99 persons fell ill and 16 children died. In Papar Pujung village, Lahai Subdistrict, North Barito Regency, 55 persons fell ill with hemorrhagic fever, four of whom died, while 86 persons, two of whom died, contracted the disease in Lanjas village, Central Teweh Subdistrict, North Barito Regency. It Andriansyah Arifin, an official of the Central Kalimantan Health Service, recently told Antara that, in general, it was children between 1 and 10 years of age who contracted the disease, and there were many fatalities because of the people's delay in reporting the disease in the region struck by the epidemic. [Excerpt] [Jakarta HARIAN UMUM AB in Indonesian 22 Oct 80 p 5]

MEASLES IN CENTRAL KALIMANTAN -- Sixteen children died of morbili (measles) which struck Pundu village, Cempaka Mulia Subdistrict, East Kotawaringin Regency, Central Kalimantan. The disease spread in August and September. A KOMPAS source in Sampit (the capital of East Kotawaringin Regency) said the local Health Service and other local agencies have taken steps to prevent the spread of the disease. Heasles which struck the village in August was not reported immediately by either the kampung chief or the local residents. The village chief reported the disease to the doctor at the People's Health Center in Cempaka Mulia on 25 September only after many people were ill and 16 children had died of the disease. Since Pundu village is located far from Cempaka Mulia Subdistrict (approximately a 6-hour journey by klotok), the doctor and medical personnel arrived in the area on 27 September. Help could be offered, particularly to the children suffering from the disease, only since that time. Dr Yusuf Sukandar, chief of the East Kotawaringin Level II Health Service, and Dr Andriansyah Arifin, P3M (control and prevention of contagious diseases) chief, who also work in the field, said there were 94 cases of measles in Pundu village. Those still alive when assistance arrived were given intensive care. Touching on the number who died of the disease, the medical personnel gathered that victims suffering from measles also suffered complications, meaning that the children who died also had bronchopneumonia coupled with malnutrition. [Excerpts] [Jakarta KOMPAS in Indonesian 30 Oct 80 p 12]

GASTROENTERITIS IN BOLAANG MONGONDOW—Gastroenteritis, which swept through several villages in Bintauna Subdistrict, Bolaan Mongondow Regency, these past 3 months, claimed 115 victims, of whom four died. According to Bolaang Mongondow Health Service information, the disease was caused by the prolonged dry season in the region. Symptoms of cholera, in addition to gastroenteritis, are appearing in several of the villages of the regency. [Excerpts] [Jakarta SINAR HARAPAN in Indonesian 21 Oct 80 p 3] 6804

CSO: 5400 16

INFECTIONS, MEASLES CAUSE HIGH RATE OF BLINDNESS

Salisbury THE HERALD in English 18 Dec 80 p 20

[Text]

SOME 60 000 Malawians suffer from some form of blindness, according to a recent Government survey. And more than 160 000 patients were treated for eye infections and blindness in all hospitals in the country in 1978.

With one of the highest incidences of bitndness in the world. Malawi suffers a disproportionately large loss in human resources available for national development. Or does it?

The Council for the Handicapped administers an exceptional experimental scheme which involves some 50 blind farmers working on holdings in the heavily infected southern districts.

SUCCESSES

They grow cotion, groundnuts, maire and tobacco, putting to use the same facilities available to sighted farmers. In some cases, these bilind farmers have even outproduced their sighted counterparts!

Because of the successes of the programme, the council will be extending these services to help make more blind persons self reliant.

Bind women are trained at a community development college also in the south. With assistance from the Royal Commonwealth Society for the Blind, the Rotary Club and the Christian Service Committee, these handiesped girls and women are taught cottage crafts, ecokary, child care, hygiene, agriculture and home management.

After their training they are given basic equipment to enable them to start on their own in their home areas under the supervision of the Community Devalopment and Social Welfare staff who also assist them in the sale of their products.

who also assist them in the sale of their products. A weaving factory situated in Blantyre district built with financial assistance from West Germany offers yet more employment opportunities to blind and other disabled

The factory was opened by the President in June 1976 and according to a Ministry of Community Development and Social Welfare spokesman is "making tremendous contributions to the economy of the country and to the weilbeing of the handicapned."

CARPETS

Only 18 of the 69 em-ployees at the factory are able-bodied. Items made at the factory include carat the factory include car-pets, handbags and table mats. The establishment of the factory was a result of the council's in-tensions to find alter-native possibilities for in-dustrial employment for the handleapped the handleapped.

Many of Malawi's unsighted are children.
Malawi's Minister of Health, Mr L. C. Chaziya
Phiri, told a recent regional conference on bilindness in Malawi that many children under the age of five suffered loss of sight due to measles contracted in association with mainutrition.

Malnutrition in Malawi? This was surprising news to most delegates since Malawi is not only self-sufficient in food but is a net exporter of food to other countries.

Mr Phiri told the con-Mr Phiri told the con-ference drawn from the neighbouring states of Zambia, Zimbabwe, Bots-wana. Lesotho and Swariland that mainutri-tion in Malawi stemmed from improper diet infrom improper diet it stead of insufficient diet.

in view of these findings, the Government has launched plans to revise the emphasis of the country's maternal and child health clinics to concentrate more on nutrition and disease prevention as well as a closer monitoring of children's growth and health indices.

In 1973, Malawi in-augurated the Material and Child Health Programme which organises and develope anti and post natal clinics throughout the country.
It has been found that

much of the blindness stems from untreated eye infections which are particularly prevalent in the south and along Malawi's extensive lake shoreline. This suggests that the unusually high incidence is perhaps due to water-borne diseases. possibly originating from Lake Malawi which runs almost the whole of Malawi's 700 km length.

HERBS

Researchers have also found that many cases of blindness originate from improper use of strong traditional herts. While people are being encouraged to use available modern medical treatment for eve problems, obserfor eye problems, observers note that traditional healers should also be approached directly.

Since a substantial amount of the indigenous population will likely continue to use them, the healers should be encouraged to either change their practices, or submit them to standardisation or some other mathod that some other method that would stem the damper.

The Royal Commonwealth Society for the Blind provides an ophthal-mically equipped mobile eye unit with a medical officer which operates from a rural hospital in one of the heavily affected southern areas.

The medical officer gives on-the-spot treat-ment for simple infections while complicated cases are referred to specialists at the central hospital in Blantyre

In addition, the con-ference agreed to estab-lish a training centre for auxiliary eye-care per-sonnel to meet the needs of Malawi and the other countries of the region.—

VIRAL CONJUNCTIVITIS REPORTED ON EAST, WEST COASTS

Over 30 Cases Daily

Kuala Lumpur NEW SUNDAY TIMES in English 9 Nov 80 p 1

[Excerpt]

RUANTAN, Sai. — Viral con junctivitis ban hit Emantan. The number of cases being treated at the hospital and private clinics here is on the increase. The General Hospital's poly clinic and eye clinic treated about 70 cases of viral conjunctivitis over the past week — the same number the hospital handled for the whole of last menth.

The State Medical

Director, Datuk Dr Dharam Singh, said: "We are new treating from 30 to 30 such cases daily."

Several private clinics also reported treating an increasing number of viral conjunctivitis cases over the past week.

Increase in Capital Area

Kuala Lumpur NEW STRAITS TIMES in English 10 Nov 80 p 7

[Excerpt]

KUALA LUMPUR, Sun. — Viral conjunctivitis has hit Kuala Lumpur and Petaling Jaya, and several private clinics have reported treating an increasing number of cases over the past week.

cases over the past week.

"Sore eyes," as it is commonly called, is reported to be spreading rapidly here.

A woman doctor in Lorong Ara Kiri Dua here said over the past week she had treated nearly 40 cases of viral conjunctivitis in both children and adulta.

BRIEFS

TSETSE FLY ERADICATION--The Federal Department of Pest Control Services has intensified its efforts towards the eradication of tse-tse flies in the country. To this end, the department has acquired a helicopter in addition to their fixed wing aircraft in Kaduna and are being programmed for a nation-wide spraying operation. Speaking in Jos, the director of the department, Dr. B.K. Maisa, said that their ground spraying programme would also continue. Dr. Maisa told the meeting that the fight against tse-tse flies was not only a local problem, but covered the whole continent. [Text] [Kaduna NEW NIGERIAN in English 22 Nov 80 p 11]

AFGHAN REFUGEES SURVEYED FOR TUBERCULOSIS

Karachi DAWN in English 13 Dec 80 p 8

[Text]

The survey worn for early detection of tuberculouis among Arghan refugees in their tamps has been started through man miniature radiography (MMR).

This was statted in Karachi yesterday by Dr A. H. Saeed, Chairman, thest specialists panel "who is also secretary of the committee for Tuberculosis Control among Af-

He said the Baluchistan Government is helping actively for providing medical facilities and has reserved 25 per cent of the beds at Fatima Jincah Ramitorium, Ouetta for Afghan refugee patients need

For the Frontier Province Afghan refugees camps, the MMR plant has been dorsted by the Canadian association and it will be used shortly.

Dr Second further said a mobile - X-ray van has also been donated by a Commission association. The Columbia Lung Association also from Canada made a donation of trailer truck.

He said full use of these equipment will be made for the treat ment of the Afghan refugees.—

BRIEFS

GASTRO-ENTERITIS IN KARACHI--The KMC has reported gastro-enteritis cases in the city and has advised citizens to take precautionary measures including use of boiled drinking water. The KMC Health Department has warned public not to use sub-soil water, ice candies, rotten or over-ripe, unripe and cut-fruits and over-ripe vegetables. Gastro-enteritis patients, mostly children, have been taken to private doctors also but no death was reported so far. Three leading hospitals of the city last night said gastro-enteritis cases were referred to the hospitals but none in critical stage. [Text] [Karachi DAWN in English 3 Dec 80 p 8]

PUNJAB VACCINATION CENTERS--The Punjab Health Department will establish 120 centres during this year for immuning children from six communicable diseases of Heasles, Diphtheria, Pertusis, Tetanus, Poliomyelitis, Tuberculosis and Diarrheas. These centres will cover 120 towns having population of 20,000 or above. Necessary training is being imparted to the vaccination staff of Lahore, Sheikhupura and Kasur Districts from November this year. It would be recalled that Government started the Expanded Programme on Immunisation from July 1979 and 119 centres are functioning in 31 towns with population of 50,000 or above. According to the statistics, there are 17.36 lakh of cases and out of these 1.37 lakh deaths occur among children in Punjab due to these communicable diseases. [Text] [Lahore THE PAKISTAN TIMES in English 8 Dec 80 p 3]

UNITED ARAB EMIRATES

BRIEFS

TEN HEPATITIS CASES--Dubai, 4 Dec (ITTIHAD)--The Kuwait hospital here has been treating about 10 cases of jaundice among children during the past five days. The paediatric consultant at the hospital Dr Hohmoud Fatahalah warned of the possible spread of the disease among children in Dubai and urged families to take general hygiene measures in regard to food and drink. [Text] [Abu Dhabi EMIRATES NEWS in English 5 Dec 80 p 2]

GIA IAI-KON TUM REPORTS PROGRESS IN ELIMINATING MAIARIA

Hanoi MHAN DAN in Vietnamese 10 Nov 80 p 3

[Article by Nguyen The Huynh: "Gia Lai-Kon Tun Strives to Eliminate Malaria"]

[Text] Gia lai-Kon Tum, situated west of the Truong Son Mountains and lying at an altitude of 200 to 1500 meters, has an area of 24,000 square kilometers, 80 percent of which is forested, and a population of nearly 600,000. Some 64 percent of the population are members of ethnic minority groups (Jarai, Bhanar, Sedang, etc.), who in the past lived nomad lives, who have many backward customs and whose deficient material lives adversely affect their health. Since the liberation the province has received 50,00 people from the provinces of Nghia Binh, Binh Tri Thien, Ha Nam Ninh, and Hai Hung, who have gone there to create new economic mones.

In that plateau area there are thousands of streams which flow into three major rivers, the Po Go, the Ba and the I-Drang, and are also the source of such large rivers as the Thu Bon, the Tra Bong, the Ve, the Tra Khuc, etc. The area is very sunny, there is much rain, and the climate varies according to the terrain and altitude of each area. That creates conditions for the breeding of mosquitoes and for the development of malaria.

Many medical examinations have shown that the ratio fo parasite infestation among the people is 12.1 percent. Malaria accounts for 42 percent of the cases treated in medical facilities, and the death rate due to malaria is very high.

Gia Lai-Kon Tum has begun the task of eliminating malaria and protecting the health of the ethnic minority people and the people in the new economic sones. Last year Gia Lai-Kon Tum carried out two DDT sprayings within the sphere of the entire province, and gave 1,028,820 inoculations. During the first 6 months of this year Gia Lai-Kon Tum used 30 tons of a 75 percent DDT solution to spray 168 villages and precincts, and inoculated 595,906 people, including 51,754 people in 51 new economic sones. Some 548,162 people were given preventive treatment by taking fixed doses, and consumed nearly 4 million malaria pills. In 1977 (the base year), the malaria parasite rate was 12.7 percent, but it has now declined to 2.07 percent. The number of patients treated for malaria in the medical facilities has gradually declined in 1977 they accounted for 42.3 percent of the patients, in 1978 for 31.4 percent of the patients, in 1979 for 16.6 percent of the patients, and during the first 6 months of 1980 for only 13.3 percent.

By the end of this year Gia Lai-Kon Tum is determined to fulfill its malaria eradication plan by lowering the parasite-infestation rate in the province to under 2.5 percent, making Kon Tum City and A-Giun-Pa District the first district units to essentially eliminate malaria, and practically contributing to protecting the health and improving the living conditions of the people and to strengthening the economy and national defense.

YELLOW FEVER CASES REPORTED, PREVENTIVE MEASURES TAKEN

Caracas EL UNIVERSAL in Spanish 13 Nov 80 Sec 4 p 35

[Text] Caracas, 12 Nov (VENPRES)—New cases of yellow fever have been reported this year as the result of uncontrolled immigration across our borders, according to a statement made today by Rafael Albornoz, director of public Health of the Hinistry of Health and Social Welfare (MSAS).

Albornoz said that those affected, a total of four thus far this year, are persons without identification papers almost all from Colombia.

It is important to note that during 1975, 1976 and 1977, no cases of yellow fever were reported, which makes us believe that it was beginning in 1978, when immigration of persons without IDs started to increase, that new persons affected by this terrible disease started to show up, Albornoz said.

"Since we are unable to control these people, we recommend that all persons traveling to the interior be vaccinated against yellow fever to prevent contagion and propagation," he added.

"However, we believe," the official pointed out, "that more cases have not been reported because of the MSAS vaccination campaigns throughout the country."

He said that forest yellow fever exists in our country in all the San Camilo forest, south of Lake Maracaibo and in the areas of Guayana, which runs along the entire coast to Miranda state and the hills of Bachiller.

He also said, "We administer about 600,000 vaccinations annually in rural areas; and, even though we hope to expand our campaigns, we are facing the serious problem that Venezuela does not manufacture vaccines against yellow fever."

The doctor added that the government had intended to import vaccines from Colombia; however, as this was not possible, vaccines are being brought in from Brazil.

A new measure adopted by the MSAS calls for airline companies to require a yellow fever vaccination for persons traveling to Canaina 10 days in advance of their departure, as it is after this period of time that the vaccine's protection against yellow fever really begins, Albornoz said finally.

8143

VENEZUELA

BRIEFS

RABIES CASE REPORTED—Barquisimeto, 15 Nov—An old man identified as Simon del Carmen Mendoza, 71, died of hydrophobia in one of the wards of Central Hospital in this city. It was learned that the septuagenarian, who lived in Barrio Union, was bitten by a dog infected by rabies and did not report for medical treatment on a timely basis. When he did go the hospital center, the disease was quite advanced and he died of hydrophobia. Mendoza was a carpenter and was bitten by a street dog in his barrio but failed to seek medical attention. He is the second rabies victim in the city this year. [Text] [Caracas EL NACIONAL in Spanish 16 Nov 80 p D-29] 8143

TESTING FOR AFRICAN SWINE PEVER IN GUANTANAMO

Havana GRANMA in Spanish 17 Nov 80 p 1

[Article by Orlando Gomez]

[Text] Biological tests performed thus far in Guantanamo Province among hundreds of "follow-up test" hogs kept where there were outbreaks of African swine fever have uncovered no signs whatever of the deadly virus.

Once these tests have been satisfactorily completed, in December, all these animals--called "follow-up test subjects" by the veterminary technicians because by being present at previously infected sites they indicate whether or not the virus remained--will be sacrificed. They will then be examined again macroscopically in Guantanamo before being sent to the National Swine Fever Laboratory in Havana, where they will be examined microscopically.

If the final results of these very exhaustive tests demonstrate that no "follow-up test" hog was affected by the virus, the CENSA [National Animal Health Center] will propose to the government that hog-raising be resumed in Guantanamo Province, beginning naturally with the state units where the strictest protective and hygienic measures will be observed.

While this has been taking place, in anticipation of authorization to resume hograising there, the province has been preparing to raise, during the next few years, an impressive number of hogs of high-quality stock that will guarantee a supply of a part of the animal protein needed by inhabitants of Guantanamo and will provide meat for the rest of the people of Cuba.

An example of those preparations is the modern feeding facility with a capacity of 10,000 hogs under construction on the outskirts of the city of Guantanamo. It has all the technical elements and provisions for animal and human safety required of an installation of this sort in our country.

The project will be completely finished and turned over by the builders, Architectural Enterprise No 23, Brigade 81-42, to its sponsor, the Guantanamo Hog Enterprise, during the first quarter of 1981.

This hog-feeding facility--whose various elements are already, on the average, 80 percent complete--will automatically supply the 10,000 animals feed based on food garbage from the nearby city, which will be converted to liquid feed in the

facility's processing plant. The feed will be piped directly to each compartment or pen housing hogs.

The facility also has a complicated plant for the treatment of liquid and solid waste. This will insure processing that precludes any pollution of the water table and the transmission of disease to human beings. The resultant sediments will be removed dry and will serve as organic fertilizer used in agriculture.

One of the chief characteristics of this project, which provides a high degree of health protection for the animals, is that it is divided into two well-separated sections: one that is completely sterile and one that is not. Also worthy of mention are all the rigorous anti-epizootic measures taken, not only there but throughout the country, for the raising of this valuable animal species.

9085

'PARVOVIRUS' REPORTED TO BE ATTACKING DOG POPULATION

Caracas EL UNIVERSAL in Spanish 18 Nov 80 Sec 1 p 22

[Text] By means of an analysis made with an electronic microscope, in the Venezuelan Institute of Scientific Research (IVIC), the existence of "parvovirosis" in the feces of dogs was confirmed.

This is a viral disease which produces bloody diarrhea, lowered resistance and the death of the animal in a period of 48 hours.

This information was supplied to EL UNIVERSAL by the former president of the Venezuelan Society of Small Animal Veterinarians, Dr Enrique Gosling Guerire, who warned, "This disease could have serious economic repercussions due to the fact that it could affect the country's cattle, pork and poultry sectors."

When questioned about the statements given to the press of the capital by the Public Health Office of the SAS [Health and Social Welfare], which denied the existence of this virus, Dr Gosling Guerire said, "That was a very offhand reply inasmuch as it denied the existence of something which was not possible for them to verify or detect based on scientific reasons, since without an analysis of the feces with an electronic microscope it is impossible to make a diagnosis in animals and human beings. At the National Institute of Hygiene where they sent their samples, there is no instrument of this power.

To a newsman's question, Dr Gosling said, "The samples of feces taken from children should be examined in the same way, as the parvovirus can also effect human beings."

He also said, "It is necessary and urgent that appropriate sanitary measures be taken at the country's ports and airports to prevent the continuing import of hundreds of diseases which affect our people."

He added, "It is important for the United States embassy to be informed and to take the necessary steps, as the veterinarians of that country are not complying with international standards for the control of animal epidemics and public health, resulting in the arrival in Venezuela of dogs and cats with fungi, mange, intestinal parasites and other viral diseases."

Dr Gosling reported that even though antiparvovirosis vaccine is not being produced in Venezuela, there is a sufficient amount of such vaccine in the various clinics of Caracas.

8143

30

VENEZUELA

FOOT-AND-MOUTH DISEASE OUTBREAK REPORTED

Caracas EL NACIONAL in Spanish 6 Nov 80 p D5

[Text] Barquisimeto, 5 Nov (Special) -- Another outbreak presumed to be of foot and mouth disease has been detected at a cattle ranch in the Torres district of the state of Lara, according to Dr Orlando Ramos, coordinator of livestock development for the Ministry of Agriculture and Livestock [MAC] in this region.

"The new outbreak has been found at the El Docoro ranch in the township of El Blanco in the district of Torres, where some 160 head of cattle are affected. It is clear that we are dealing with a vesicular disease, and samples have been sent to the Veterinary Research Institute in Maracay for a determination by way of analyses as to whether it is indeed foot and mouth disease," said the MAC official.

At the El Docore ranch, where the disease was detected, there are some 2,500 head of cattle, and health measures are already being taken, which include mass innoculation and immobilization of the cattle to prevent further contagion.

This is the second time in recent months that cases of foot and mouth disease have been detected in Lara's cattle ranches, previous similar cases having occurred in areas of the Urdaneta district.

BRIEFS

EFFECTS OF DROUGHT--This year's drought is expected to result in the second-lowest wheat yield in WA for 34 years. A yield of 0.71 tonnes a hectare has been forecast by the Minister for Agriculture, Mr Old. In 1946-47 and 1969-70 the yield was 0.66 tonnes a hectare. Four more shires were drought-declared yesterday. They are Wongan Hills (the eastern section), Morawa (13 farms), Yilgarn (the whole shire) and Dundas (all the agricultural area). Further small parts of Dowerin and Beverley were also declared. The declaration--recommended by the Drought Consultative Committee and approved by Mr Old--brought the total of declarations to 31. Mr Old said that October rain had given a slight boost to the State's cereal production estimates, with a total wheat yield of 3.09 million tonnes now expected. But total cereal production would still be about 800,000 tonnes less than last year, though an extra 300,000 hectares had been sown. [Excerpt] [Perth THE WEST AUSTRALIAN in English 8 Nov 80 p 3]

SKELETON WEED--A Pithara farmer, Gary Franklin McKay, has been fined \$40 with \$45.60 costs in the Moora Court for a breach of skeleton-weed quarantine. An Agriculture Protection Board district officer, Stephen Wiencke, told the court that McKay's farm was placed in quarantine in January 1979 when skeleton weed was found on it. After the hearing the chief officer of the APB, Mr Neil Hogstron, said that the prosecution was the first for violation of skeleton weed property quarantine. The vast majority of farmers realised that it was vital to eradicate skeleton weed from the State and they cooperated fully. Last year, farmers had voluntarily contributed more than 1600 man-days to help search infested paddocks and the surrounding areas. [Excerpts] [Perth THE WEST AUSTRALIAN in English 8 Nov 80 p 26]

OUTBREAK OF BLUE MOLD DISEASE REPORTED

Santo Domingo LISTIN DIARIO in Spanish 7 Nov 80 pp 1, 13

[Article by Epifanio Rodriguez]

[Text] Santiago--Specialists of the Tobacco Institute have confirmed the presence of the fungus that is presumed to cause blue mold disease in tobacco, which was detected in the La Canela section of this township last Monday.

Minor outbreaks of the disease have been verified in the communities of Navarrete, Las Cienegas and Palmar Abajo.

This information was released yesterday morning at a press conference by agronomist Ariosto Mendez, director of the Tobacco Institute [INTABACO].

The specialists proceeded immediately to burn the crops in the La Canela area that had been affected by the fungus, and the zones where the outbreak has appeared are currently being combed using Ridomil.

Agronomist Mendez said that samples of the affected seed beds have been taken to the phytopathologic laboratories of the Secretariat of Agriculture's Plant Health Department and are presently undergoing study, involving also the laboratories of the Advanced Institute of Agriculture, to determine whether this species of fungus is indeed the cause of the disease.

The disease was discovered when Adolfo Ventura, farmer, noticed in some seed beds symptoms resembling those described in one of the circulars distributed by the INTABACO as part of its preventive measures.

Preliminary studies revealed the presence of the fungus belonging to the Peronosporales family, one species of which is the cause of the disease known as "blue mold."

Agronomist Mendez expressed the opinion that the spores of the fungus had been carried by the air. He said that these can travel through the air at a rate of at least 100 kilometers daily.

Government authorities voiced a warning recently at a press conference on the danger that blue mold represents for the Dominican Republic in view of the fact that the disease exists in some countries in the area, such as Haiti, Cuba and Jamaica, where it has caused severe damage.

A strategic plan has been drawn up to fight the disease. INTABACO specialists held a meeting yesterday which was attended by agronomists Eligio Frias and Pedro Felix, director and deputy director, respectively, of the Secretariat of Agriculture's Plant Health Department.

Dr Furny Toodd [as published], specialist in phytopathology, professor at the University of North Carolina in the United States, is providing help as a consultant.

Mendez asserts that sufficient technical capability as well as the necessary resources to combat the disease are available.

He explained that in Europe, the United States and other Latin American countries where this disease is endemic normal crops are achieved every year.

Blue mold is a fungus that destroys tobacco plantations voraciously, producing losses totaling millions.

The director of INTABACO discounted the probability that the forthcoming crop will suffer losses owing to this disease. All the seed beds will be fumigated where necessary.

To date, the current tobacco season is still at the seed-bed stage. For this crop, INTABACO has programed the planting of more than 400,000 hectares.

KERALA PALM TREES AFFECTED BY ROOT WILT

Madras THE HINDU in English 24 Nov 80 p 7

(Text)

AFFLED by a disease which is nearly a century old. coconut cultivators in six out of the 12 districts in Kerala are carnestly learning how to live with the disease.

Root wilt is one of the diseases that have defled man and science so far. First noticed in 1882 at Ecraattupettah (in Kottayam district) after a devastating flood in the Meenachil river, the disease made its second appearance a decade later in Kaviyoor and Kallooppaara in Thiruvalla taluk (Alleppey district) and in Karunagappally taluk, a coastal area in Quilon district.

On a rough estimate, the State today loses nearly 35 crores of coconuts a year because of this disease, which has affected 2.50.000 bectares—nearly one-third of the total 7.5 lakh hectares of land under coconut crop.

The disease spreads at the rate of four to six kilometres a year. The areas affected are: the area south of Aala. Keezhpallikkara. Ecrakom and Aaraattupuzha in Trichur district, north of Nemom. Neyyatinkara and Neyyar in Trivandrum district and the midlands between the coastal areas in the west and the High Ranges in the east.

Even as research is going on in the laboratories in several countries, the Central Plantation Crops Research Institute (CPCRI), in collaboration with the Kerala Agriculture Department, has decided on a massive replantation programme which will ultimately cost nearly Rs. 1,000 crores in 30 to 50 years. This replanting cycle will be repeated every 50 years.

The replanting process has already commenced in the border areas where the disease is nascent. The aim is to create a disease-free zone in Trichur and Trivandrum districts so that its northwards and southwards spread can be prevented.

The northern boundary is the Karuvannur river, about 10 km. south of Trichur. Between the north of Chalakudi river and the south of Karuvannur river in Trichur district, it is estimated that there are abot 25,000 diseased pairus, which have been removed. Since October 1978, a field station of the CPCRI has been functioning at Irinjalakuda in Trichur district, to keep a watch on the disease.

To check the southward spread of the disease. CPCRI has urged the Tamil N du Government to remove the diseased paims in Kanyakumari district. On its part, the Kerala Agriculture Department has ordered the destruction of the diseased paims south of Neyyar river, the aim being the setting up of a disease-free zone between the Neyyar and Poovar rivers.

A major problem faced by authorities in carrying out these programmes is the resistance—more often sentimental than logical—to the cutting down of a coconut tree, however, useless it may be, it was only recently that farmers in Kerala took to coconut cultivation seriously.

According to CPCRI estimates the proper care of one tree will entail an annual expenditure of about Rs. 18. The market price of one coconut now varies from Rs. 1.50 to Rs. 2.50—the latter price being the rate in cities and in "Gulf

money areas."

The CPCRI and the Government are trying to impress on the farmers that a tree which does not yield at least a dozen nuts in a year is not worth preserving. As an incentive, the Government gives Rs. 75 for every diseased palm removed. The farmer is also given a hybrid variety of seedling to be planted in place of the removed pairs.

Along with the replanting programme, there is also a major drive to educate formers in managing the diseased palm. One significant aspect of root wilt is that it is basically a debilitating one and not a lethal one like the dying noticed in the paims in the Philippines or the lethal yellowing noticed in Jamaica.

The management of a diseased garden involves maintaining of milch cattle, growing fodder crops and recycling organic wastes. These have paid rich dividends.

These practices have reduced the intensity of the disease and increased the nut yield by over 25 per cent over a five-year period. There have been instances when a diseased tree yielded 41 nuts a year as against 31 before the nursing.

The schemes success encouraged studies on inter-cropping and mixed cropping in the diseased gardens, using a large number of annual and perennial crops. The mixed farming experiment was first launched in the CPCRI regional station at Kayamkulam in 1970.

In an area of about 1.3 hectares, five milch cows were maintained in the farm along with fodder and other crops. It was found that the crop had a favourable impact on the microflora colonising on the root surface of the coconut palms irrespective of the diseased condition, showing an increase in the number of nitrogen fixing and phosphate solubilising organisms.

More extensive studies followed these encouraging results and the experiments were extended to the cultivators' farms. The main objective was to assess the relative merits of tuber crops such as tapioca, colcosia, yam, elephantfoot yam, ginger, turmeric, legumes and cocoa.

The cultivation of rocoa in root wift affected coconut gardens with irrigation resulted in an increase of approximately a 100 per cent yield of coconuts over a period of three years.

The crops selected for this purpose are such that they bring adequate income to the farmer as compensation. Apart from motivating the farmers to go in for mixed cropping. Government agencies and local bodies are also taking up the question of extending financial assistance to the farmers at concessional interest rates.

Pursued seriously, these can go a long way in minimising, if not

putting an end to the loss caused by the root wilt disease. The annual loss including that of services and wages is estimated to be around Rs. 51 crores in Kerala.

As a long-term measure, the Rs. 1.000-crore scheme also envisages the uprooting of all coconut trees in the disease-affected districts. The land would then be surveyed and classified into three types: areas where coconuts could be planted under irrigation, where the crop could be raised under rain-fed conditions and areas which are unsuitable for cultivation.

While hybrid seedlings would be planted in irrigated areas, highyielding tall varieties would be introduced in rain-fed areas.

The responsibility for replanting and raising plantations up to the fruit-bearing stage would vest in a separate agency to be set up for this purpose. The plantation would be handed over to the farmers at the bearing stage.

The cost incurred will be recovered from the farmers in 15 years. Interest on capital investment will be subsidised. The hope is that this project will help double coconut production in 15 years.

END OF FICHE DATE FILMED

13 Jan. 1981

D.D.